

EXHIBIT 11

FEDERAL STANDARD 1037C
Superseding Fed-Std-1037B, 03 June 1991



**TELECOMMUNICATIONS: GLOSSARY OF
TELECOMMUNICATION TERMS**

Prepared By:

National Communications System
Technology & Standards Division

Published By:

General Services Administration
Information Technology Service

August 7, 1996

FSC TELE

A – Z

- [Foreword](#)
- [Introduction](#)
- **The Letters:**
A B C D E
F G H I J
K L M N O
P Q R S T
U V W X Y Z
- [Appendix A](#) (*A list of Abbreviations*) (Note: Please read the *tips* before loading this file.)
- [Appendix B](#) (*An Index of major categories*)

[ITS Home](#)

13:28
1/22/2021

Good
Afternoon

[Welcome](#) | [Help](#) | [Hints](#) | [A - Z](#) | [Files](#) | [Index](#) | [Contacts](#)

[Federal Standard 1037C Home](#) | [ITS Home](#)

bus network

bus network: *See* **network topology**.

This HTML version of FS-1037C was last generated on Fri Aug 23 00:22:38 MDT 1996



[Back to A](#), [Forward to C](#)

- [b](#)
- [B](#)
- [babble](#)
- [backbone](#)
- [background noise](#)
- [background processing](#)
- [backscattering](#)
- [back-to-back connection](#)
- [backup](#)
- [backup file](#)
- [backward channel](#)
- [backward recovery](#)
- [backward signal](#)
- [backward supervision](#)
- [balance](#)
- [balanced](#)
- [balanced code](#)
- [balanced line](#)
- [balanced modulator](#)
- [balanced signal pair](#)
- [balance return loss](#)
- [balancing network](#)
- [balun](#)
- [band](#)
- [band-elimination filter](#)
- [bandpass filter](#)
- [bandpass limiter](#)
- [band-rejection filter](#)
- [band-stop filter](#)
- [band-suppression filter](#)
- [bandwidth \(BW\)](#)
- [bandwidth balancing mechanism](#)
- [bandwidth compression](#)
- [bandwidth•distance product](#)
- [bandwidth•length product](#)
- [bandwidth-limited operation](#)
- [bandwidth \(of an optical fiber\)](#)
- [bar code](#)
- [barrage jamming](#)
- [base](#)
- [baseband](#)
- [baseband local area](#)

bus topology

bus topology: *See* **network topology**.

This HTML version of FS-1037C was last generated on Fri Aug 23 00:22:38 MDT 1996



[Back to A](#), [Forward to C](#)

- [b](#)
- [B](#)
- [babble](#)
- [backbone](#)
- [background noise](#)
- [background processing](#)
- [backscattering](#)
- [back-to-back connection](#)
- [backup](#)
- [backup file](#)
- [backward channel](#)
- [backward recovery](#)
- [backward signal](#)
- [backward supervision](#)
- [balance](#)
- [balanced](#)
- [balanced code](#)
- [balanced line](#)
- [balanced modulator](#)
- [balanced signal pair](#)
- [balance return loss](#)
- [balancing network](#)
- [balun](#)
- [band](#)
- [band-elimination filter](#)
- [bandpass filter](#)
- [bandpass limiter](#)
- [band-rejection filter](#)
- [band-stop filter](#)
- [band-suppression filter](#)
- [bandwidth \(BW\)](#)
- [bandwidth balancing mechanism](#)
- [bandwidth compression](#)
- [bandwidth•distance product](#)
- [bandwidth•length product](#)
- [bandwidth-limited operation](#)
- [bandwidth \(of an optical fiber\)](#)
- [bar code](#)
- [barrage jamming](#)
- [base](#)
- [baseband](#)
- [baseband local area](#)

bridge

bridge: 1. In communications networks, a device that (a) links or routes signals from one ring or bus to another or from one network to another, (b) may extend the distance span and capacity of a single LAN system, (c) performs no modification to packets or messages, (d) operates at the data-link layer of the OSI-Reference Model (Layer 2), (e) reads packets, and (f) passes only those with addresses on the same segment of the network as the originating user. (188) 2. A functional unit that interconnects two local area networks that use the same logical link control procedure, but may use different medium access control procedures. 3. A balanced electrical network, *e.g.* , a Wheatstone bridge. *Note:* A bridge may be used for electrical measurements, especially resistances or impedances. 4. *See* hybrid coil.



This HTML version of FS-1037C was last generated on Fri Aug 23 00:22:38 MDT 1996



[Back to A](#), [Forward to C](#)

- [b](#)
- [B](#)
- [babble](#)
- [backbone](#)
- [background noise](#)
- [background processing](#)
- [backscattering](#)
- [back-to-back connection](#)
- [backup](#)
- [backup file](#)
- [backward channel](#)
- [backward recovery](#)
- [backward signal](#)
- [backward supervision](#)
- [balance](#)
- [balanced](#)
- [balanced code](#)
- [balanced line](#)
- [balanced modulator](#)
- [balanced signal pair](#)
- [balance return loss](#)
- [balancing network](#)
- [balun](#)
- [band](#)
- [band-elimination filter](#)
- [bandpass filter](#)
- [bandpass limiter](#)
- [band-rejection filter](#)
- [band-stop filter](#)
- [band-suppression filter](#)
- [bandwidth \(BW\)](#)
- [bandwidth balancing mechanism](#)
- [bandwidth compression](#)
- [bandwidth•distance product](#)
- [bandwidth•length product](#)
- [bandwidth-limited operation](#)
- [bandwidth \(of an optical fiber\)](#)
- [bar code](#)
- [barrage jamming](#)
- [base](#)
- [baseband](#)
- [baseband local area](#)

network topology



network topology: The specific physical, *i.e.*, real, or logical, *i.e.*, virtual, arrangement of the elements of a network. *Note 1:* Two networks have the same topology if the connection configuration is the same, although the networks may differ in physical interconnections, distances between nodes, transmission rates, and/or signal types. *Note 2:* The common types of network topology are illustrated [refer to the figure on this page] and defined in alphabetical order below:

- **bus topology:** A network topology in which all nodes, *i.e.*, stations, are connected together by a single bus.
- **fully connected topology:** A network topology in which there is a direct path (branch) between any two nodes. *Note:* In a fully connected network with n nodes, there are $n(n-1)/2$ direct paths, *i.e.*, branches. *Synonym* **fully connected mesh network**.
- **hybrid topology:** A combination of any two or more network topologies. *Note 1:* Instances can occur where two basic network topologies, when connected together, can still retain the basic network character, and therefore not be a hybrid network. For example, a tree network connected to a tree network is still a tree network. Therefore, a hybrid network accrues only when two basic networks are connected and the resulting network topology fails to meet one of the basic topology definitions. For example, two star networks connected together exhibit hybrid network topologies. *Note 2:* A hybrid topology always accrues when two different basic network topologies are connected.
- **linear topology:** See **bus topology**.
- **mesh topology:** A network topology in which there are at least two nodes with two or more paths between them.
- **ring topology:** A network topology in which every node has exactly two branches connected to it.
- **star topology:** A network topology in which peripheral nodes are connected to a central node, which rebroadcasts all transmissions received from any peripheral node to all peripheral nodes on the network, including the originating node. *Note 1:* All peripheral nodes may thus communicate with all others by transmitting to, and receiving from, the central node only. *Note 2:* The failure of a transmission line, *i.e.*, channel, linking any peripheral node to the central node will result in the isolation of that peripheral node from all others. *Note 3:* If the star central node is passive, the originating node must be able to tolerate the reception of an echo of its own transmission, delayed by the two-way transmission time, *i.e.*, to and from the central node, plus any delay generated in the central node. An active star network has an active central node that usually has the means to prevent echo-related problems. (188)
- **tree topology:** A network topology that, from a purely topologic viewpoint, resembles an interconnection of star networks in that individual peripheral

[Back to A](#), [Forward to C](#)

- [b](#)
- [B](#)
- [babble](#)
- [backbone](#)
- [background noise](#)
- [background processing](#)
- [backscattering](#)
- [back-to-back connection](#)
- [backup](#)
- [backup file](#)
- [backward channel](#)
- [backward recovery](#)
- [backward signal](#)
- [backward supervision](#)
- [balance](#)
- [balanced](#)
- [balanced code](#)
- [balanced line](#)
- [balanced modulator](#)
- [balanced signal pair](#)
- [balance return loss](#)
- [balancing network](#)
- [balun](#)
- [band](#)
- [band-elimination filter](#)
- [bandpass filter](#)
- [bandpass limiter](#)
- [band-rejection filter](#)
- [band-stop filter](#)
- [band-suppression filter](#)
- [bandwidth \(BW\)](#)
- [bandwidth balancing mechanism](#)
- [bandwidth compression](#)
- [bandwidth•distance product](#)
- [bandwidth•length product](#)
- [bandwidth-limited operation](#)
- [bandwidth \(of an optical fiber\)](#)
- [bar code](#)
- [barrage jamming](#)
- [base](#)
- [baseband](#)
- [baseband local area](#)

nodes are required to transmit to and receive from one other node only, toward a central node, and are not required to act as repeaters or regenerators. (188) *Note 1:* The function of the central node may be distributed. *Note 2:* As in the conventional star network, individual nodes may thus still be isolated from the network by a single-point failure of a transmission path to the node. *Note 3:* A single-point failure of a transmission path within a distributed node will result in partitioning two or more stations from the rest of the network.



This HTML version of FS-1037C was last generated on Fri Aug 23 00:22:38 MDT 1996

- network
- baseband modulation
- baseband signaling
- basecom
- base communications (basecom)
- base Earth station
- base station
- basic exchange telecommunications radio service (BETRS)
- basic group
- basic mode link control
- basic rate interface (BRI)
- basic service
- basic service element (BSE)
- basic serving arrangement (BSA)
- basic status
- batched communications
- batched transmission
- batch processing
- baud (Bd)
- Baudot code
- BCC
- BCD
- B channel
- BCH code
- BCI
- Bd
- beacon
- beam
- beam diameter
- beam divergence
- beamsplitter
- beam steering
- beamwidth
- bearer channel
- bearer service
- beating
- beeping
- B8ZS
- bel (B)
- bell (BEL) character
- Bell Operating Company (BOC)
- bend loss
- BER
- BERT
- BETRS
- between-the-lines entry
- BEX
- bias
- bias distortion
- biconical antenna